INNOVATION GRANT, 2018
REQUEST FOR PROPOSALS

To foster innovative solutions to some of the greatest challenges facing Minnesota production agriculture, the Minnesota Corn Research & Promotion Council (MCR&PC) and the Minnesota Corn Growers Association (MCGA) have allocated funding to aid farmers (or research faculty in a Level 4 funding request: see criteria below) who would like to test or prove an innovative practice on their farm to solve a specific challenge. In the next growing season, we anticipate that there will be continued public focus on water quality, nitrate loss and soil conservation efforts in Minnesota agriculture. The MCR&PC and the MCGA are accepting proposals from farmers who would like to test or prove their ideas related to improved nitrogen management and/or conservation practice through a field scale project on their corn production farm. Proposals will also be accepted from research faculty with an innovative idea that matches the project priorities and Level 4 criteria listed below.

PURPOSE OF THE GRANTS AND WHO MAY APPLY
These grants are intended to engage the ingenuity of Minnesota corn farmers in solving questions related to production agriculture and environmental stewardship. Please see priorities below. Any active Minnesota corn farmer subject to the Minnesota corn check-off (for Levels 1, 2 or 3) or university research faculty (for a Level 4 funding request: see criteria below) may apply for these grants.

PROJECT PRIORITIES
This request for proposals has a specific focus of investigating innovations as well as replicated trial research to:
1) Improve nitrogen management toward reduced nitrate loss and reduced contamination of ground and surface water. This may include rain fed or irrigated corn production. Projects are encouraged to include monitoring drainage tile flow, where applicable, for nutrient loss under the proposed practice(s), OR

2) Innovative conservation practices to reduce soil erosion, improve soil health and improved ground and/or surface water quality associated with the focus farm operation. OR

3) Trials comparing and contrasting the measurable value(s) to Minnesota corn farmers of utilizing large data set decision tools including but not limited to products such as Encirca®, Climate FieldView™, R7®, Ag Solver, Adapt-N, etc. At least two (preferably three) of these tools must be included in the project and agronomics, economics, nutrient management, conservation and use efficiency, should be part of the measured outcomes.

One of the biggest challenges of implementing new ideas is having an accurate estimate of what they cost to execute. In order to discover and promote innovations that may benefit other corn farmers, providing accurate information on costs to a farmer who might implement a new practice will be expected as part of proposal and the final reporting of each innovation grant.

PROPOSAL OPTIONS
Level 1: Past and/or current Innovation Grant recipients may be solicited by MN Corn to host a field day showcasing their innovation grant project to local area farmers, local and state level governmental leadership, local business leadership and other influencers. The scheduling of the field day will coordinated with the host farm and must occur between April 1st and November 15th, 2018. MN Corn staff will assist with coordination, advertisement, planning, set-up, and costs to support a farmer-hosted “Innovation Field Day” event. Prospective farm hosts will be approached by MN Corn staff shortly after January 1st, 2018 to determine availability of individuals and operations to host a field day event. Up to three events may be scheduled for 2018 across the state.
Level 2: Up to $7,000 (per year) grant toward development of a farmer lead innovative concept or best practice idea within a corn production system. Funding may be used to develop or modify equipment to test a novel practice. Project funding is not intended to retroactively support an already funded project or accepted farming practice at the proposed location unless it is a continuation of a previously awarded MN Corn innovation grant. Projects should be applied to no less than 20 acres of corn production to test the innovative concept with comparison to normal production practice. A submitted proposal should involve one growing season with potential for evaluation to justify renewal of the grant each year for up to three years total. Collaboration with at least one representative from a SWCD, NRCS, university and/or other agency personnel is expected. Replicated trials with a statistical design and analysis methodology will be given priority consideration. Up to ten projects involving development of a novel and innovative concept may be funded.

Level 3: Up to $30,000 (per year) grant to test a farmer lead innovative practice in replicated farm scale trials. Collaboration with a qualified individual(s) [private, agency, university, etc.] to develop a sound farm trial experimental design is expected as part of the proposal however funding is not meant to be a supplement for a non-MCR&PC project. The proposal must include a statistical design as well as plans for data collection and analysis. Level 3 projects are expected to comprise farm scale trials with publishable results that have the potential as proof of concept research toward broad adoption of a technique or practice focused on priorities listed in this RFP. Equipment purchase is limited to no more than 10% per year of the award and must be for the purpose of the research. Proposals should involve three growing years to capture treatments in multiple environments as part of the design. Annual renewal of the project grant will be based on evaluation through site visits and via progress reporting in line with the proposed work plan. Up to six projects involving replicated trials of an innovative practice may be funded.

Level 4: Up to $10,000 (one year) grant for a university research faculty to test an innovative or novel scientific approach or develop preliminary data to be used to leverage greater funding concerning one of the priorities identified below. Funding is not intended to be used for new equipment, salary or to supplement ongoing research but to facilitate investigation of novel ideas similar to Level 2 funding for farmers. Up to two projects involving an innovation grant for university research faculty may be funded.

PROPOSAL CONTENT
These instructions are intended to give the applicant guidelines for the proposal format as well as expectations for reporting information gained as a result of the project (see Conditions of Funding Acceptance below). The instructions are intended to insure submission of a complete proposal with high potential for successful completion. Level 1 project funding and proposed field days will be directed by MCR&PC. Funding for Level 2, 3 or 4 projects will be on a 12 month basis (April 1st, 2018 – March 31st, 2019). For each proposal, objectives and goals must be identified that can be completed in the designated duration of the grant.

The unbound proposal should address the following sections in no more than a total of five single-spaced 8.5” X 11” pages including the cover page and budget section:

1. Cover page should be completed and attached to your proposal (SEE BELOW).
2. Include a synopsis (≤ 500 words) of what you hope to develop/demonstrate or investigate with the grant. If the project is funded, this synopsis will be reproduced in the MN Corn Research Directory.
3. Identify the Level of the proposed project matching one of the Proposal Options.
4. Identify each collaborator(s) [SWCD, NRCS, university, or other agency] for the proposal and the level of involvement. Note: At least one person from any of these entities is required as a collaborator for Level 2 or 3 grants. List each collaborator, their work affiliation and area of expertise, and how they will contribute to the project. Note: Level 4 funding has no collaborator requirement.
5. Identify all other external sources of funding associated with the project whether past, current, or applied for. Note: Failure to disclose all collaborators and external sources of funding may negate the terms of a grant award.
6. Within the body of the proposal, provide a **work plan of the project** including objectives and how they will be accomplished (the methods used) during the funding cycle. Replicated trials must include a description of the statistical design and analysis protocols expected to be utilized. All proposals should include a description of how costs will be tabulated to estimate actual cost of implementation of the innovation or practice on a per acre basis.

7. Identify the deliverables – what you hope to demonstrate at completion of the project.

8. Include a general itemized budget section with the proposal including but not limited to: supplies and materials, equipment, laboratory analysis, consulting or invited speaker expense, or other costs. Any equipment or components to be purchased using these funds must be identified in the initial proposal.

*Note: Sections 4 and 5 above may not be applicable for Level 4 proposals.*

**PROPOSAL DELIVERY AND DEADLINE**

An electronic version of the proposal must be received via the application process on the MN Corn website ([http://www.mncorn.org/research-rfps/](http://www.mncorn.org/research-rfps/)) or, as a hard-copy at the contact address below, no later than 3:00 p.m., Central Standard Time, **December 15th, 2017**.

Mail or email proposals to:

- **Physical Address**: Minnesota Corn Growers Association  
  Attn: Paul Meints - Research Director  
  738 1st Avenue East  
  Shakopee, MN 55379

- **Email Address**: Pmeints@mncorn.org

- **952.460.3601**

**PROPOSAL EVALUATION**

Members of the MCGA/MCR&PC Production Stewardship Focus Team will evaluate each proposal based on the following criteria:

- Relevance of the project to the priorities and fit to the expectations indicated in this RFP
- Soundness of proposed work and experimental design where appropriate
- Proposal ingenuity to provide possible solutions to the RFP priorities
- Proficiencies of lead farmer(s) and collaborator(s)
- Probability of successful completion and potential to be of value to MN corn farmers

Successful and non-successful applicants will be notified by **March 1st, 2018**.

**CONDITIONS OF FUNDING ACCEPTANCE**

- The body of the proposal must include a synopsis (≤ 500 words); the work plan including objective(s), methods proposed, statistical design (if appropriate), deliverables at the close of the project, and the proposed budget of the funding requested.
- The lead farmer/faculty researcher on each successful proposal for 2018 will also be expected to provide one-page quarterly progress updates on or before **July 31st, 2018**, **October 31st, 2018** and **December 31st, 2018** and an additional final report will be due on or before **April 30th, 2019** for Level 2, 3 and 4 projects.
- The lead farmer/researcher agrees to participate, if requested, in interviews conducted by either Minnesota Corn communications staff or other media (we will assist in preparation if requested) during the grant period. Further public engagement, such as panel participation at a state agricultural event to discuss successes and/or challenges that occurred during the project may also be requested.
- The lead farmer/researcher agrees to provide a summary paragraph (abstract ~ 250 words) included with the final report upon completion of the research. The abstract and final report are due with the final invoice. The abstract will also be published in the biennial Minnesota Corn Research Summary.
Proposal Title (ten words or less):

Project Farmer Leader(s)
   Name:
   Mailing Address:

E-mail address:
Phone Number:
Acres of corn you intend to plant in 2018:
County where the project will be located:
MCGA Member:  □ Yes  □ No

MCR&PC/MCGA Innovation Grant Topic
Check the appropriate Innovation Grant level the proposal matches and list all collaborators/advisors involved with the project:
 □ Level 1: __________________________________________________________
 □ Level 2: __________________________________________________________
 □ Level 3: __________________________________________________________
 □ Level 4: __________________________________________________________

This Section for Office Use Only
MCR&PC/MCGA Action on Innovation Grant Proposals
   Funded  □   Not Funded  □

FY2018 Allocation ____________________________
Project #: ____________________ (will be assigned after successful funding)
MCR&PC/MCGA Comments: